SANTA CRUZ BIOTECHNOLOGY, INC.

# c-Rel (B-6): sc-6955

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## BACKGROUND

c-Rel is the cellular cognate of v-Rel, the avian reticuloendotheliosis virus strain T transforming gene. v-Rel encodes a phosphoprotein that is located in the cytoplasm of transformed spleen cells and in the nucleus of non-transformed fibroblasts, in contrast to the c-Rel protein, which is cytoplasmic. c-Rel has been shown to represent a constituent of the κB site binding transcription factor NFκB, which plays a crucial role in the expression of immunoglobulin κ light chain gene. In contrast to c-Rel, v-Rel is truncated in its C-terminal transactivation domain and does not appear to function as a transcriptional transactivator. It has thus been postulated that v-Rel may interfere with the normal transcription of NFκB regulated genes and thus cause transformation by a mechanism analogous to v-ErbA, which binds to the thyroid hormone-responsive region in certain erythroid genes needed for differentiation, but cannot be activated by thyroid hormone.

## CHROMOSOMAL LOCATION

Genetic locus: REL (human) mapping to 2p16.1; Rel (mouse) mapping to 11 A3.2.

## SOURCE

c-Rel (B-6) is a mouse monoclonal antibody raised against amino acids 1-300 mapping at6 the N-terminus of c-Rel of human origin.

## PRODUCT

Each vial contains 200 µg $IgG_1$ lambda light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-6955 X, 200 µg/0.1 ml.

c-Rel (B-6) is available conjugated to agarose (sc-6955 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-6955 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-6955 PE), fluorescein (sc-6955 FITC), Alexa Fluor® 488 (sc-6955 AF488), Alexa Fluor® 546 (sc-6955 AF546), Alexa Fluor® 594 (sc-6955 AF594) or Alexa Fluor® 647 (sc-6955 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-6955 AF680) or Alexa Fluor® 790 (sc-6955 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

## APPLICATIONS

c-Rel (B-6) is recommended for detection of c-Rel p75 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for c-Rel siRNA (h): sc-29857, c-Rel siRNA (m): sc-29858, c-Rel shRNA Plasmid (h): sc-29857-SH, c-Rel shRNA Plasmid (m): sc-29858-SH, c-Rel shRNA (h) Lentiviral Particles: sc-29857-V and c-Rel shRNA (m) Lentiviral Particles: sc-29858-V.

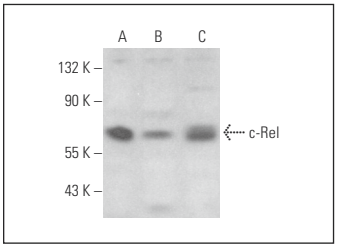
c-Rel (B-6) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of c-Rel: 75 kDa.

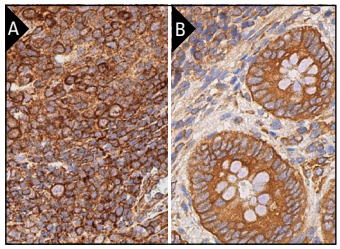
## STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## DATA




c-Rel (B-6): sc-6955. Western blot analysis of c-Rel expression in K-562 nuclear extract (**A**) and HeLa (**B**) and RAW 264.7 (**C**) whole cell lysates.




c-Rel (B-6): sc-6955. Immunoperoxidase staining of formalin fixed, paraffin-embedded human tonsil tissue showing cytoplasmic staining of cells in germinal center and cells in non-germinal center (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human appendix tissue showing cytoplasmic staining of glandular cells and lymphoid cells (**B**).

## SELECT PRODUCT CITATIONS


1. Dong, C., et al. 1998. Defective T cell differentiation in the absence of JNK1. Science 282: 2092-2095.
2. Nam-Cha, S.H., et al. 2009. Lymphocyte-rich classical Hodgkin's lymphoma: distinctive tumor and microenvironment markers. Mod. Pathol. 22: 1006-1015.
3. Belardo, G., et al. 2010. Heat stress triggers apoptosis by impairing NFκB survival signaling in malignant B cells. Leukemia 24: 187-196.
4. Togano, T., et al. 2012. Synergistic effect of 5-azacytidine and NFκB inhibitor DHMEQ on apoptosis induction in myeloid leukemia cells. Oncol. Res. 20: 571-577.
5. Okuyama, E., et al. 2013. Molecular mechanisms of syndecan-4 upregulation by TNF-α in the endothelium-like EAhy926 cells. J. Biochem. 154: 41-50.
6. Jeltsch, K.M., et al. 2014. Cleavage of roquin and regnase-1 by the paracaspase MALT1 releases their cooperatively repressed targets to promote $T_H17$ differentiation. Nat. Immunol. 15: 1079-1089.
7. Heine, A., et al. 2015. The VEGF-receptor inhibitor axitinib impairs dendritic cell phenotype and function. PLoS ONE 10: e0128897.
8. Sauter, M.M. and Brandt, C.R. 2016. Primate neural retina upregulates IL-6 and IL-10 in response to a herpes simplex vector suggesting the presence of a pro-/anti-inflammatory axis. Exp. Eye Res. 148: 12-23.
9. Nyati, K.K., et al. 2017. TLR4-induced NFκB and MAPK signaling regulate the IL-6 mRNA stabilizing protein Arid5a. Nucleic Acids Res. 45: 2687-2703.
10. Jin, X., et al. 2019. Phosphorylated RB promotes cancer immunity by inhibiting NFκB activation and PD-L1 expression. Mol. Cell 73: 22-35.e6.


## RESEARCH USE

For research use only, not for use in diagnostic procedures.